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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/501,426

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Javier Francisco Aprea

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS

P.O. BOX 3001

BRIARCLIFF MANOR, NY 10510

EXAMINER

SAINT CYR, LEONARD

ART UNIT

PAPER NUMBER

2626

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/501,426	Applicant(s) APREA ET AL.	
	Examiner LEONARD SAINT CYR	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 May 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 - 21 is/are rejected.
- 7) ☒ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 05/12/08 have been fully considered but they are not persuasive.

Applicant argues that Fielder et al., do not teach that the length of each audio frame is determined from a defined sequence of frame lengths or overlap lengths (Amendment, pages 6 – 9).

The examiner disagrees, Fielder et al., teach “encoded information frame includes control information conveying lengths of segments of audio information in a sequence of overlapping segments...and the sequence having a length equal to the frame interval plus a frame overlap interval” (col.5, line 65 – col.6, line 8). Having the sequence length equals to the frame interval plus a frame overlap interval implies determining the frame length from a defined sequence of frame lengths or overlap lengths, since the lengths of segments of audio information consists of a sequence of overlapping segments.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1 – 16 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 1 – 16 define non-statutory processes because they merely manipulate an abstract idea (mathematical algorithm). The claimed process, a series of steps to be performed on a computer, simply manipulates an abstract idea; does not have any post or pre computer process activity.

In the instant application, the disclosure is directed to any and every structure for carrying out the claimed functions, and not solely to specific structure.

Claims 1 – 16 reviewed in light of the specification, simply recite an abstract idea for encoding audio using a stream that carries audio and video data.

As can be seen by claims 1 – 16, these claims recite an abstract idea by setting forth the step of “providing a mean effective audio frame length F that equals a video frame length $1/F_v$ over an integral number M video frames, varying lengths F of the audio frames in a defined sequence of frame lengths”. These steps are abstract ideas.

Reviewing each claim as whole fails to show the transformation or reduction of subject matter to a different state of thing. Providing a mean effective audio frame length F that equals a video frame length $1/F_v$ over an integral number M video frames, is merely an abstract idea to encode audio data, not a different state or thing.

It is readily apparent that when claims 1 – 16 are each taken as a whole, the claims are directed to the preemption of an abstract idea, and thus are non-statutory.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 17 – 21 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. The applicant omits, means for producing audio frames, and means for generating a mean effective audio frame length, which are critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976).

Claim Rejections - 35 USC § 102

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
5. Claims 1 – 4, 13 – 17, and 19 – 21 are rejected under 35 U.S.C. 102(a) as being anticipated by Fielder et al., (US Patent 6,226,608).

As per claims 1, and 17, Fielder et al., teach a method of audio encoding a stream that carries audio and video data, including: encoding the audio data to provide a mean effective audio frame length {overscore (F)} that equals a video frame length $1/f_{sub.V}$ over an integral number M video frames, wherein the encoding includes varying lengths F of the audio frames in a defined sequence of frame lengths

(“sequence of overlapping segments...and the sequence having a length equal to the frame interval plus a frame overlap interval” col.5, line 65 – col.6, line 8).

As per claim 2, Fielder et al., further disclose the frame length F is adjusted by varying an overlap O between successive audio frames (“overlapping segments having lengths that vary...”; Abstract, line 9; col.15, lines 1 – 5).

As per claim 3, Fielder et al., further disclose that the value $F(j)$ repeats periodically on j , the periodicity of $F(j)$ defining a sequence of frames (“sequence of overlapping segments”; col.6, lines 1 – 5).

As per claim 4, Fielder et al., further disclose that the method having M video and N audio frames per sequence, each audio frame being composed of k blocks of t samples each (col.12, lines 48 – 51).

As per claims 13, and 14, Fielder et al., teach a method of audio encoding a stream that encodes audio and video data including encoding audio samples of N quasi video-matched audio frames in frames with a defined sequence of overlap lengths, wherein an effective length of the audio frames coincides with a length of a sequence of M video frames, where M and N are positive integers (“overlapping segments having lengths that vary...”; col.5, lines 20 – 24, and 30 – 35; col.5, line 65 – col.6, line 8).

As per claim 15, Fielder et al., further disclose audio frames, each of which is tagged to indicate a size of the audio frame (N parameter pertains ...segment length"; col.17, lines 4 – 6; col.11, lines 26, and 27).

As per claim 16, Fielder et al., further disclose that each block of each audio frame is tagged to indicate whether or not the block is a redundant block ("cyclical redundancy check"; col.29, line 6).

As per claim 19, Fielder et al., teach an audio decoder for decoding a stream that encodes audio and video data, which decoder calculates an expected effective frame length of an incoming frame based on a defined sequence of frame lengths, adjusts the actual length of the incoming frame to make it equal to the expected frame length, determines whether any block within a received frame is a redundant block or a non-redundant block, mapping the non-redundant blocks onto sub-band samples ("effective maximum length... cyclical redundancy check"; col.5, lines 20 – 24; Abstract, lines 9 - 11; col.15, lines 1 – 5; col.29, line 6; col.5, line 65 – col.6, line 8).

As per claim 20, Fielder et al., further disclose modifying the overlap status of blocks in the data stream by application of one or more of a set of block operators to each block ("editing operations like splicing"; col.5, lines 27 – 29).

As per claim 21, Fielder et al., further disclose that the set of operators includes a SHIFT, an operator that is a combination of both DROP and APPEND operators ("shifting to a shorter segment length"; col.5, line 8).

Claim Rejections - 35 USC § 103

6. Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fielder et al., (US Patent 6,226,608).

As per claim 18, Fielder et al., do not specifically teach that the variable overlaps includes a total of P short overlaps of length O and a total of Q long overlaps of length O+ in an overlap sequence. However, since Fielder et al., disclose generate a sequence of overlapping segments of audio information (col.5, lines 58, and 59). One having ordinary skill in the art at the time the invention was made would have found it obvious to have short and long overlaps segments, because that would help process one or more channels of audio information by a block-encoding process to generate encoded information stream (col.7, lines 55 - 57).

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to LEONARD SAINT CYR whose telephone number is (571) 272-4247. The examiner can normally be reached on Mon- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or (571)-272-1000.

LS
07/22/08
/Vijay B. Chawan/
for Richemond Dorvil, SPE of Art Unit 2626

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